IN THE ABSTRACT

Please replace the abstract with the following rewritten Abstract:

[0037] A method and a system is provided, useable in electrical control sensors for shaft speed signal frequency change rate tests, detecting intermittent or "in-range" failures. The method estimates a short-term variance (standard deviation) of the measured signal or signal rate of change, using the equation: $Var[x] = E[x^2] - E^2[x]$, where $E[x^2]$ is] is an estimated average of the squared measured signal or rate of change over the short term, and $E^2[x]$ is a squared estimated average of the measured signal or rate of change over the short term. The estimated variance is compared with a predefined variance limit for a predefined amount of time, and if the estimated variance exceeds the predefined variance limit for the predefined amount of time, the measured signal is deemed invalid. A latching counter is used for timing, and its time out rate is preferably proportional to the time period the measured input is true. The step for estimating a short-term variance of the measured signal uses several filters performing averaging function.